



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,751	06/27/2003	Magdy Younes	11788-7 MIS:jb	5565
24223	7590	01/09/2008		
SIM & MCBURNEY 330 UNIVERSITY AVENUE 6TH FLOOR TORONTO, ON M5G 1R7 CANADA			EXAMINER MITCHELL, TEENA KAY	
			ART UNIT 3771	PAPER NUMBER
			MAIL DATE 01/09/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/606,751	Applicant(s) YOUNES, MAGDY	
	Examiner Teena Mitchell	Art Unit 3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 20-23 and 38-46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 is/are allowed.
- 6) ☒ Claim(s) 24,30,31 and 37 is/are rejected.
- 7) ☒ Claim(s) 25-29 and 32-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/27/04; 10/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 20-23 and 38-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/17/07.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24, 30, 31, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Servidio et.al. (5,927,274).

Regarding claim 24, Servidio discloses a device for detecting the onset of inspiratory effort in a patient on mechanical ventilation; circuitry for measuring airway pressure, rate of gas flow and volume of gas flow of the patient (Figs. 2, 4, 5, 9-11B, 18); amplifier to apply a gain factor to the signal representing rate of gas flow to convert said signal into a gas flow pressure signal (167, 173, 125, 133; Figs. 9-11B, 18); amplifier to apply a gain factor to the signal representing volume of gas flow to convert said signal into a gas volume pressure signal (167, 173, 196, 191, 282; Figs. 2, 5, 9-11B, 18); summing amplifier that generates a composite pressure signal comprising the sum of airway pressure signal, the gas pressure signal, and the gas volume pressure

Art Unit: 3771

signal, with all signals having suitably adjusted polarity (Figs. 2, 4, 5, 9-11B, 18); means to permit adjustment of K_r and K_v to provide a desired trajectory of composite pressure signal baseline in the latter part of the exhalation phase (290, 225, 224); circuitry to direct said composite pressure signal to a T onset identification circuitry during a suitable period in the expiratory phase said circuitry to detect a change in trajectory (224, 225, 290, 242; Figs. 2, 5, 9-11B, 18); means for generating a signal corresponding to T onset when measured change in trajectory of composite pressure signal exceeds a specified threshold (135, 140; Figs. 2, 5, 9-11B, 18).

Regarding claim 30, Servidio discloses circuitry that precludes T onset identification during a specified period after the end of ventilator's inflation phase (Figs. 2, 4, 5, 9-11B, 18; after inspiratory effort the device of Servidio has circuitry detect when the inflation phase ends (290).

Regarding claim 31, Servidio discloses wherein the T onset identification circuitry comprises circuitry to obtain the rate of change in amplitude of the composite pressure signal and to obtain the difference between current said rate of change with said rate of change of the composite pressure signal at a specified earlier time, and to generate a T onset signal when said difference exceeds a set threshold value (Figs. 2, 4, 5, 9-11B, 18).

Regarding claim 37, Servidio discloses wherein signals corresponding to T onset are used to trigger ventilator cycles and/or signals corresponding to T end are used to cycle off inflation phase of ventilator (Figs. 2, 4, 5, 9-11B, 18).

Allowable Subject Matter

Claims 1-19 are allowable over the prior art of record.

Claims 25-29 and 32-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

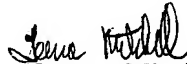
The following is a statement of reasons for the indication of allowable subject matter: The overall combination of the method steps of claim 1 for detecting the onset of inspiratory effort in a patient on a mechanical ventilation, with adjusting Kf and Kv to result in a desired linear trajectory of composite pressure signal baseline in the latter part of the exhalation phase; the comparing steps of method steps (f) is neither anticipated nor rendered obvious by the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teena Mitchell whose telephone number is (571) 272-4798. The examiner can normally be reached on Monday-Thursday from 6:30 Am to 5:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Teena Mitchell
Primary Examiner
Art Unit 3771
November 27, 2007


TKM